

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A copper alloy comprising:  
2.0 to 4.0 mass% of Ti; and  
0.01 to 0.50 mass% of at least one element selected from Fe, Co, Ni, Cr, V, Zr, B, and P as ~~a third element group~~; an additional element; and  
second-phase particles formed of Cu, Ti and the additional element;  
wherein not less than 50% of the total content of the ~~third element group~~ additional element exists as ~~a the~~ a second-phase particle.
2. (Currently Amended) A copper alloy comprising:  
2.0 to 4.0 mass% of Ti;  
0.01 to 0.50 mass% of at least one element selected from Fe, Co, Ni, Cr, V, Zr, B, and P as ~~a third element group~~ an additional element; and  
~~a second-phase particles particle with not less than 0.01  $\mu\text{m}^2$  area observed by a cross section speculum~~ formed of Cu, Ti and the additional element;  
wherein the second-phase particles have not less than 0.01  $\mu\text{m}^2$  area observed by a cross section speculum, and the rate of the number of second-phase particles in which the content of the ~~third element group~~ additional element within the second-phase particles is not less than 10 times the content of the ~~third element group~~ additional element within the alloy is not less than 70% of the total number of the second-phase ~~particle~~ particles.
3. (Currently Amended) A copper alloy comprising:  
2.0 to 4.0 mass% of Ti;  
0.01 to 0.50 mass% of at least one element selected from Fe, Co, Ni, Cr, V, Zr, B, and P as ~~a third element group~~ an additional element; and

a second-phase particle ~~with not less than  $0.01 \mu\text{m}^2$  area observed by a cross section~~  
~~speculum~~ formed of Cu, Ti and the additional element;

wherein the second-phase particle has not less than  $0.01 \mu\text{m}^2$  area observed by a cross  
section speculum, and the second-phase particle has an area percentage Af of not more than  
 1.0%.

4. (Currently Amended) A copper alloy comprising:

2.0 to 4.0 mass% of Ti;

0.01 to 0.50 mass% of at least one element selected from Fe, Co, Ni, Cr, V, Zr, B, and

P ~~as a third element group~~ an additional element;

a second-phase ~~particles~~ ~~particle with~~ formed of Cu, Ti and the additional element,  
wherein the second-phase particles have not less than  $0.01 \mu\text{m}^2$  area observed by a cross  
 section speculum; and

an equable dispersion degree E defined by the following equation

$$E = \frac{\sqrt{\frac{1}{n} \sum_i^n (d_i - \sqrt{A_0/N_A})^2}}{\sqrt{\frac{A_0}{N_A}}}$$

wherein  $d_i$  is the distance from ~~the~~ an i-th second-phase particle to ~~the~~ a nearest second-phase  
 particle,  $A_0$  is the measured visual field area, and  $N_A$  is the number of the second-phase  
~~particle~~ particles confirmed within the measured visual field area, wherein the equable  
 dispersion degree E is not more than 0.8.

5. (Currently Amended) A copper alloy comprising:

2.0 to 4.0 mass% of Ti;

0.01 to 0.50 mass% of at least one element selected from Fe, Co, Ni, Cr, V, Zr, B, and

P ~~as a third element group~~ an additional element;

an area percentage  $A_f$  of ~~a second-phase particles~~ particle with not less than  $0.01 \mu\text{m}^2$  area observed by a cross section speculum formed of Cu, Ti and the additional element, wherein the second-phase particles have not less than  $0.01 \mu\text{m}^2$  area observed by a cross section speculum, and the area percentage  $A_f$  is not more than 1.0%;

~~a the second-phase particle~~ particles with not less than  $0.01 \mu\text{m}^2$  area observed by the cross section speculum; and

an equable dispersion degree  $E$  defined by the following equation

$$E = \frac{\sqrt{\frac{1}{n} \sum_i^n (d_i - \sqrt{A_0/N_A})^2}}{\sqrt{\frac{A_0}{N_A}}}$$

wherein  $d_i$  is the distance from ~~the~~ an  $i$ -th second-phase particle to ~~the~~ a nearest second-phase particle,  $A_0$  is the measured visual field area, and  $N_A$  is the number of the second-phase ~~particle~~ particles confirmed within the measured visual field area, wherein the equable dispersion degree  $E$  is not more than 0.8.

6. (Original) The copper alloy according to claim 1, wherein the content of the Ti is 2.5 to 3.5 mass%.

7. (Withdrawn) A producing method for the copper alloy of claim 1 comprising the steps of:

producing an ingot in which 0.01 to 0.50 mass% of at least one element selected from Fe, Co, Ni, Cr, V, Zr, B, and P is added to Cu, and 2.0 to 4.0 mass% of Ti is added;

solution treating for heating the ingot up to ultimate temperature  $T^\circ\text{C}$ , the ingot heated to temperature exceeding  $600^\circ\text{C}$  at a heating rate of not less than  $20^\circ\text{C}/\text{sec}$ , and the ingot is then held for not less than 10 sec within a temperature range of  $T-100^\circ\text{C}$  to  $T^\circ\text{C}$ , resulting in a supersaturated solid solution;

cold rolling by applying cold rolling with 5 to 50% of degree of processing from conditions of the supersaturated solid solution; and

aging treating for applying a thermal treatment to the rolled material at 350 to 450°C.